

# SEQUENCE LISTING

<110> Kinney, Anthony

<120> Hypoallergenic Transgenic Soybeans

<130> BB1432 US NA

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<150> 60/189,823

<151> 16 MARCH 2000

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 <212> DNA  
 <213> Glycine max

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<212> PRT
<213> Glycine max

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Glu Met Arg Val Leu Lys Ser His Gly Gly Arg Ile Phe Tyr Arg His
                35                      40                      45

Met His Ile Gly Phe Ile Ser Met Glu Pro Lys Ser Leu Phe Val Pro
  50                      55                      60

Gln Tyr Leu Asp Ser Asn Leu Ile Ile Phe Ile Arg Arg Gly Glu Ala
  65                      70                      75                      80

Lys Leu Gly Phe Ile Tyr Asp Asp Glu Leu Ala Glu Arg Arg Leu Lys
                85                      90                      95

Thr Gly Asp Leu Tyr Met Ile Pro Ser Gly Ser Ala Phe Tyr Leu Val
                100                      105                      110

Asn Ile Gly Glu Gly Gln Arg Leu His Val Ile Cys Ser Ile Asp Pro
                115                      120                      125

Ser Thr Ser Leu Gly Leu Glu Thr Phe Gln Ser Phe Tyr Ile Gly Gly
                130                      135                      140

Gly Ala Asn Ser His Ser Val Leu Ser Gly Phe Glu Pro Ala Ile Leu
                145                      150                      155                      160

Glu Thr Ala Phe Asn Glu Ser Arg Thr Val Val Glu Glu Ile Phe Ser
                165                      170                      175

Lys Glu Leu Asp Gly Pro Ile Met Phe Val Asp Asp Ser His Ala Pro
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Ser Leu Trp Thr Lys Phe Leu Gln Leu Lys Lys Asp Asp Lys Glu Gln
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Gln Leu Lys Lys Met Met Gln Asp Gln Glu Glu Asp Glu Glu Glu Lys  
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 225 230 235 240  
 Val Asn Glu Lys Ile Glu Asn Lys Asp Thr Ala Gly Ser Pro Ala Ser  
 245 250 255  
 Tyr Asn Leu Tyr Asp Asp Lys Lys Ala Asp Phe Lys Asn Ala Tyr Gly  
 260 265 270  
 Trp Ser Lys Ala Leu His Gly Gly Glu Tyr Pro Pro Leu Ser Glu Pro  
 275 280 285  
 Asp Ile Gly Val Leu Leu Val Lys Leu Ser Ala Gly Ser Met Leu Ala  
 290 295 300  
 Pro His Val Asn Pro Ile Ser Asp Glu Tyr Thr Ile Val Leu Ser Gly  
 305 310 315 320  
 Tyr Gly Glu Leu His Ile Gly Tyr Pro Asn Gly Ser Lys Ala Met Lys  
 325 330 335  
 Thr Lys Ile Lys Gln Gly Asp Val Phe Val Val Pro Arg Tyr Phe Pro  
 340 345 350  
 Phe Cys Gln Val Ala Ser Arg Asp Gly Pro Leu Glu Phe Phe Gly Phe  
 355 360 365  
 Ser Thr Ser Ala Arg Lys Asn Lys Pro Gln Phe Leu Ala Gly Ala Ala  
 370 375 380  
 Ser Leu Leu Arg Thr Leu Met Gly Pro Glu Leu Ser Ala Ala Phe Gly  
 385 390 395 400  
 Val Ser Glu Asp Thr Leu Arg Arg Ala Val Asp Ala Gln His Glu Ala  
 405 410 415  
 Val Ile Leu Pro Ser Ala Trp Ala Ala Pro Pro Glu Asn Ala Gly Lys  
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 Leu Lys Met Glu Glu Glu Pro Asn Ala Ile Arg Ser Phe Ala Asn Asp  
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 <211> 494  
 <212> DNA  
 <213> Glycine max

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 <212> PRT  
 <213> Glycine max

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Phe Val Ala Gln Glu Val Val Val Gln Thr Glu Ala Lys Thr Cys Glu  
 20 25 30

Asn Leu Ala Asp Thr Tyr Arg Gly Pro Cys Phe Thr Thr Gly Ser Cys  
 35 40 45

Asp Asp His Cys Lys Asn Lys Glu His Leu Leu Arg Gly Arg Cys Arg  
 50 55 60

Asp Asp Phe Arg Cys Trp Cys Thr Lys Asn Cys  
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<210> 7  
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 <212> DNA  
 <213> Artificial Sequence

<220>  
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<210> 8  
 <211> 30  
 <212> DNA  
 <213> Glycine max

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<210> 9  
 <211> 701  
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 <213> Glycine max

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 Pro Gln Pro Ser His Val Thr Ala Leu Ile Thr Arg Pro Ser Cys Pro  
 35 40 45  
 Asp Leu Ser Ile Cys Leu Asn Ile Leu Gly Gly Ser Leu Gly Thr Val  
 50 55 60  
 Asp Asp Cys Cys Ala Leu Ile Gly Gly Leu Gly Asp Ile Glu Ala Ile  
 65 70 75 80  
 Val Cys Leu Cys Ile Gln Leu Arg Ala Leu Gly Ile Leu Asn Leu Asn  
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<210> 11  
 <211> 396  
 <212> DNA  
 <213> Glycine max

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Trp Leu Gln Ser Thr Asp Phe Pro Gln Phe Lys Pro Glu Glu Ile Thr  
35 40 45

Ala Ile Met Asn Asp Phe Asn Glu Pro Gly Ser Leu Ala Pro Thr Gly  
50 55 60

Leu Tyr Leu Gly Gly Thr Lys Tyr Met Val Ile Gln Gly Glu Pro Gly  
65 70 75 80

Ala Val Ile Arg Gly Lys Lys Gly Pro Gly Gly Val Thr Val Lys Lys  
85 90 95

Thr Gly Ala Ala Leu Ile Ile Gly Ile Tyr Asp Glu Pro Met Thr Pro  
100 105 110

Gly Gln Cys Asn Met Val Val Glu Arg Leu Gly Asp Tyr Leu Ile Asp  
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Gln Gly Tyr  
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<211> 396  
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Trp Ala Gln Ser Thr Asp Phe Pro Gln Phe Lys Pro Glu Glu Ile Thr  
35 40 45

Ala Ile Met Asn Asp Phe Asn Glu Pro Gly Ser Leu Ala Pro Thr Gly  
50 55 60

Leu Tyr Leu Gly Gly Thr Lys Tyr Met Val Ile Gln Gly Glu Pro Gly  
65 70 75 80

Ala Val Ile Arg Gly Lys Lys Gly Pro Gly Gly Val Thr Val Lys Lys  
85 90 95

Thr Gly Ala Ala Leu Ile Ile Gly Ile Tyr Asp Glu Pro Met Thr Pro  
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Gln Gly Tyr  
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20 25 30



Ile Gln Lys Leu Asn Ala Leu Lys Pro Gly Asn Arg Ile Glu Ser Glu  
 35 40 45  
 Gly Gly Leu Ile Glu Thr Trp Asn Pro Asn Asn Lys Pro Phe Gln Cys  
 50 55 60  
 Ala Gly Val Ala Leu Ser Arg Cys Thr Leu Asn Arg Asn Ala Leu Arg  
 65 70 75 80  
 Arg Pro Ser Tyr Thr Asn Gly Pro Gln Glu Ile Tyr Ile Gln Gln Gly  
 85 90 95  
 Lys Gly Ile Phe Gly Met Ile Tyr Pro Gly Cys Ser Ser Thr Phe Glu  
 100 105 110  
 Glu Pro Gln Gln Pro Gln Gln Arg Gly Gln Ser Ser Arg Pro Gln Asp  
 115 120 125  
 Arg His Gln Lys Ile Tyr Asn Ser Arg Glu Gly Asp Leu Ile Ala Val  
 130 135 140  
 Pro Thr Gly Val Ala Trp Trp Met Tyr Asn Asn Glu Asp Thr Pro Val  
 145 150 155 160  
 Val Ala Val Ser Ile Ile Asp Thr Asn Ser Leu Glu Asn Gln Leu Asp  
 165 170 175  
 Gln Met Pro Arg Arg Phe Tyr Leu Ala Gly Asn Gln Glu Gln Glu Phe  
 180 185 190  
 Leu Lys Tyr Gln Gln Glu Gln Gly Gly His Gln Ser Gln Lys Gly Lys  
 195 200 205  
 His Gln Gln Glu Glu Glu Asn Glu Gly Gly Ser Ile Leu Ser Gly Phe  
 210 215 220  
 Thr Leu Glu Phe Leu Glu His Ala Phe Ser Val Asp Lys Gln Ile Ala  
 225 230 235 240  
 Lys Asn Leu Gln Gly Glu Asn Glu Gly Glu Asp Lys Gly Ala Ile Val  
 245 250 255  
 Thr Val Lys Gly Gly Leu Ser Val Ile Lys Pro Pro Thr Asp Glu Gln  
 260 265 270  
 Gln Gln Arg Pro Gln Glu Glu Glu Glu Glu Glu Asp Glu Lys Pro  
 275 280 285  
 Gln Cys Lys Gly Lys Asp Lys His Cys Gln Arg Pro Arg Gly Ser Gln  
 290 295 300  
 Ser Lys Ser Arg Arg Asn Gly Ile Asp Glu Thr Ile Cys Thr Met Arg  
 305 310 315 320  
 Leu Arg His Asn Ile Gly Gln Thr Ser Ser Pro Asp Ile Tyr Asn Pro  
 325 330 335  
 Gln Ala Gly Ser Val Thr Thr Ala Thr Ser Leu Asp Phe Pro Ala Leu  
 340 345 350

Ser	Trp	Leu	Arg	Leu	Ser	Ala	Gly	Phe	Gly	Ser	Leu	Arg	Lys	Asn	Ala
		355					360					365			
Met	Phe	Val	Pro	His	Tyr	Asn	Leu	Asn	Ala	Asn	Ser	Ile	Ile	Tyr	Ala
		370				375					380				
Leu	Asn	Gly	Arg	Ala	Leu	Ile	Gln	Val	Val	Asn	Cys	Asn	Gly	Glu	Arg
385					390					395					400
Val	Phe	Asp	Gly	Glu	Leu	Gln	Glu	Gly	Arg	Val	Leu	Ile	Val	Pro	Gln
				405					410					415	
Asn	Phe	Val	Val	Ala	Ala	Arg	Ser	Gln	Ser	Asp	Asn	Phe	Glu	Tyr	Val
			420					425					430		
Ser	Phe	Lys	Thr	Asn	Asp	Thr	Pro	Met	Ile	Gly	Thr	Leu	Ala	Gly	Ala
		435					440					445			
Asn	Ser	Leu	Leu	Asn	Ala	Leu	Pro	Glu	Glu	Val	Ile	Gln	His	Thr	Phe
		450				455					460				
Asn	Leu	Lys	Ser	Gln	Gln	Ala	Arg	Gln	Ile	Lys	Asn	Asn	Asn	Pro	Phe
465					470					475					480
Lys	Phe	Leu	Val	Pro	Pro	Gln	Glu	Ser	Gln	Lys	Arg	Ala	Val	Ala	
				485					490					495	